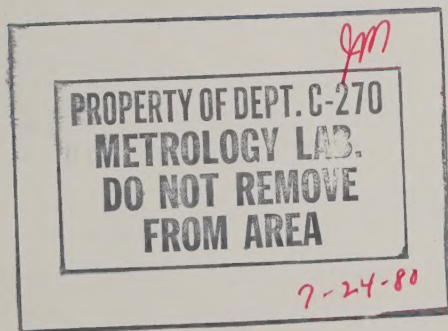
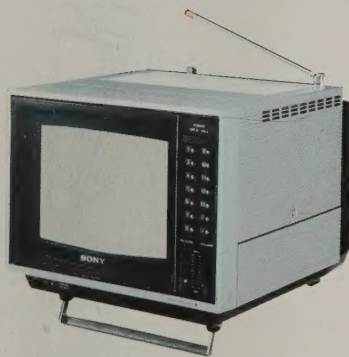


SONY®

TRINITRON® COLOR TV RECEIVER

KV-8100



OPERATING INSTRUCTIONS

OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-8100

Serial No. _____

CONTENTS

Warning.....	2
Precautions.....	3
Trinitron system.....	4
Features.....	5
Location of parts and controls.....	6
Power sources.....	8
Operation.....	10
Introduction to channel presetting.....	13
External antenna connection.....	21
Checking the set by yourself.....	22
Specifications.....	23

Congratulations on choosing this advanced Sony Color TV Receiver. For best results, please read this manual thoroughly before operating the set, and keep these instructions handy for future reference.

WARNING

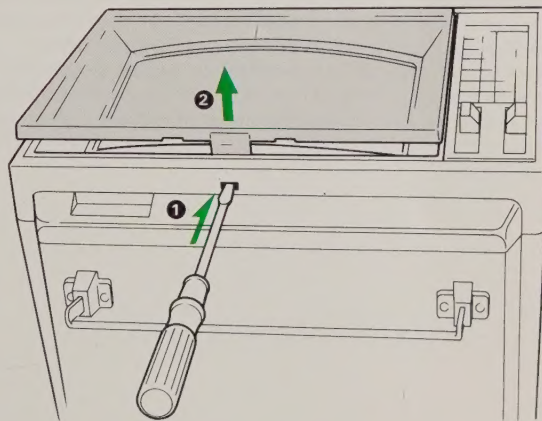
To prevent fire or shock hazard, do not expose the set to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- For ac operation, operate only on 120 V ac with the supplied ac power cord. For rechargeable battery operation, use the Sony BP-81 Battery Pack (optional). For car battery operation, 12 V or 24 V dc is required. Use the car battery cord recommended for this set.
- The supplied ac power cord is equipped with a polarized plug (one blade of the plug is wider than the other), which will fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration shock.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Do not attempt to make any of the adjustments at the small holes in the rear of the set. These are special adjustments to be performed only by qualified personnel.
- Unplug the set from the wall outlet when it is not to be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set. For maximum protection, repack your set as it was originally packed at the factory.

- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzene, or abrasive cleansers, since these will damage the cabinet. Remove the smoked filter as illustrated and wipe the screen once a year. This will keep the picture bright. As a safety precaution, unplug the set before cleaning it.



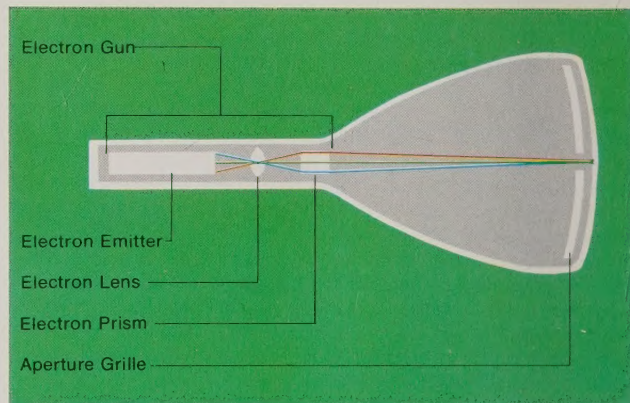
For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS" included with this manual in the vinyl bag.

TRINITRON SYSTEM

Your Sony Color TV employs the latest concept in color-image reproduction...the TRINITRON System. A product of intensive engineering research, the TRINITRON System ensures bright, sharp pictures and few service requirements.

The system consists of the TRINITRON Gun and "Aperture Grille". The TRINITRON Gun produces the three beams that excite the primary phosphors on the screen. The beams are aimed and focussed by a unique set of electron lenses and a pair of electron prisms. Pictures stay sharp at all points on the screen because all three beams pass through the center of a large lens. The Aperture Grille color-selection system allows a larger amount of electrons to pass through it to provide high brightness on the screen.

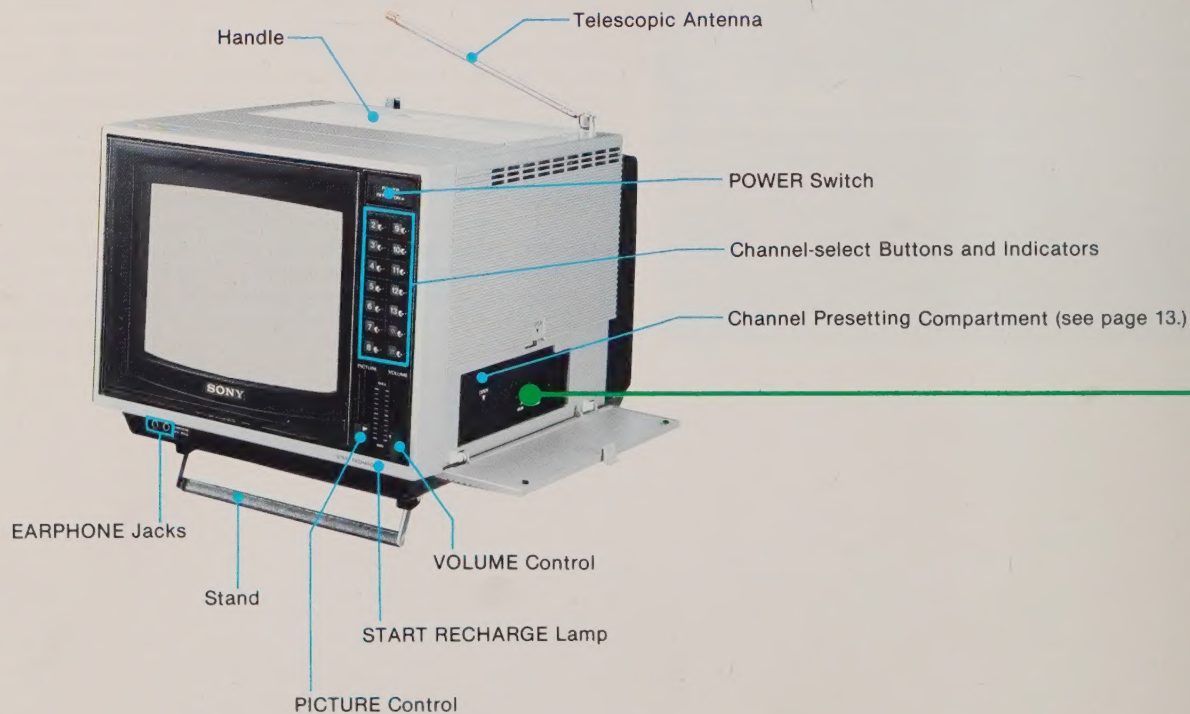
"Guard Grille", a series of non-reflecting vertical stripes that alternate with the phosphor color stripes, absorbs ambient light reflections. Moreover, this TV employs newly developed phosphors. The result is a high-contrast, brighter picture with no increase in energy consumption.



FEATURES

- The semi-automatic program search system permits easy preset tuning of up to 14 channels; VHF, UHF or inactive channels for monitoring the playback of a video tape recorder, etc..
- Advanced new automatic circuits are built into your TV to eliminate the necessity for frequent readjustment of the tuning and color controls. A touch of the AFT Switch instantly activates these circuits to tune your set for peak performance. A touch of the AUTO Switch locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.
- Your Sony Color TV features the ECONOQUICK system which provides a picture only a few seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption for this feature when the set is not in use.
- Three different power sources; household ac, rechargeable battery, or 12V/24V car battery, enable you to use the TV anywhere.

LOCATION OF PARTS AND CONTROLS





AUTO Switch

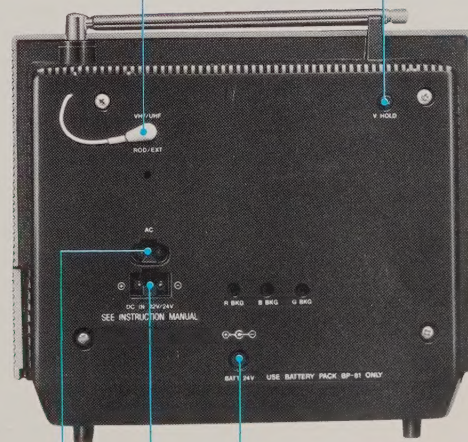
HUE Control

COLOR Control

BRIGHTness Control

VHF/UHF ROD/EXT Antenna
Input Jack (minijack)

Vertical HOLD Control



AC Input Socket

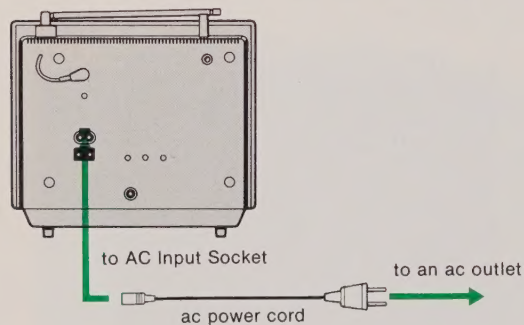
DC IN 12V/24V Socket

BATT 24V Input Jack

POWER SOURCES

HOUSE CURRENT OPERATION

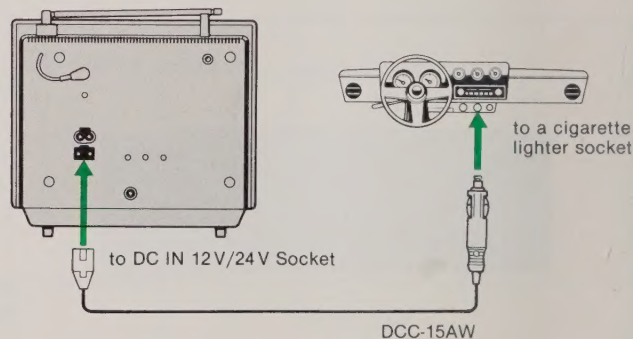
Insert the 2-hole plug of the ac power cord (supplied) into the AC Input Socket of the TV, and connect the other end of the cord to a 120 V ac wall outlet.



CAR BATTERY OPERATION

The KV-8100 operates on a 12 V or 24 V vehicle battery through a cigarette lighter socket. Connect the optional Sony DCC-15AW Car Battery Cord as illustrated.

For details, refer to the instruction manual of the DCC-15AW.



- Disconnect the ac power cord from the AC Input Socket. Otherwise, the Car Battery Cord cannot be inserted into the DC IN 12 V/24 V Socket.
- The DCC-15AW is designed for use with a 12 V or 24 V negative ground system.

RECHARGEABLE BATTERY OPERATION

The Sony BP-81 Battery Pack (optional) is specially designed to be used with the KV-8100 and permits TV viewing anywhere where house current is not available.

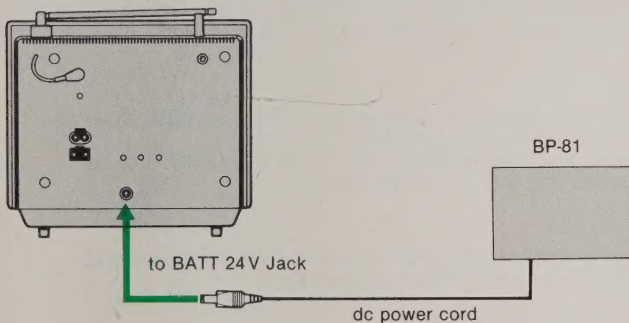
First, check the POWER Switch is turned off.

Plug the dc power cord of the BP-81 into the BATT 24 V Jack, and then turn the TV on.

For details, refer to the instructions furnished with the BP-81.

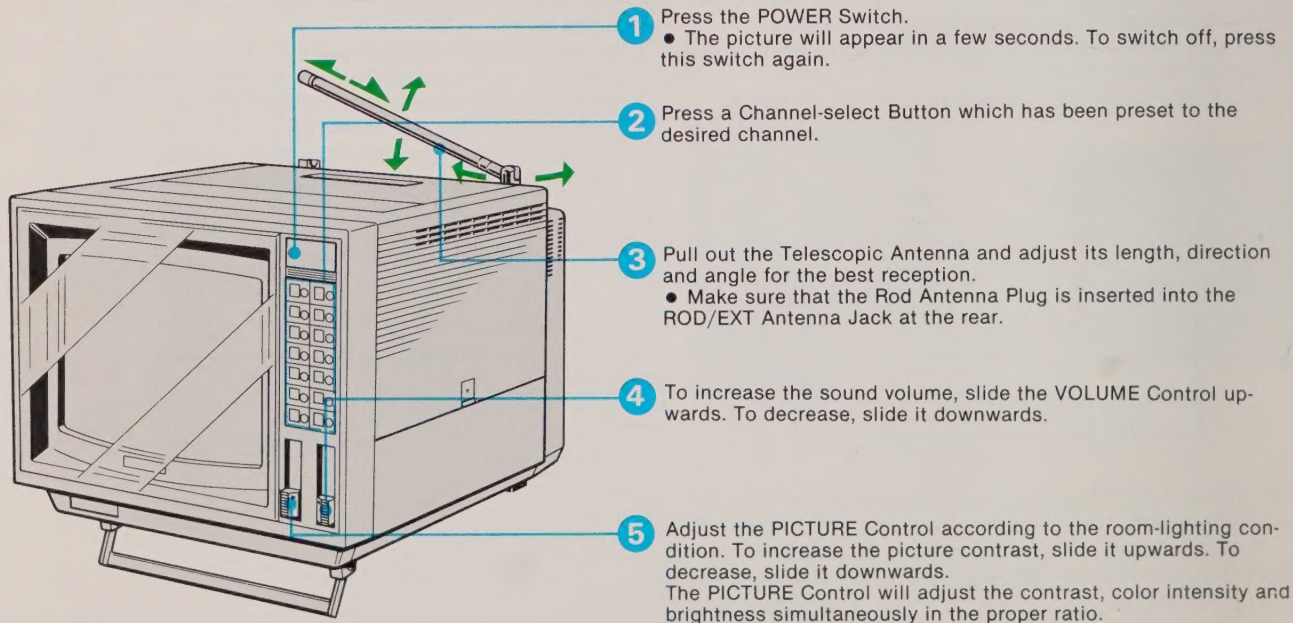
Notes:

- Make sure that the ac power cord or the car battery cord is disconnected from the TV. Otherwise, the set cannot be operated on the BP-81.
- A BP-81 which has been charged for 12 hours will provide approximately 3 hours of continuous TV viewing. The use-time may change considerably due to operating conditions. When the picture disappears and the red START RECHARGE Lamp blinks, the battery is exhausted. The BP-81 should then be recharged. For recharging procedure, refer to the BP-81 instructions.



OPERATION

Operate the controls in the numbered sequence for proper operation. The Channel-select Buttons marked 2-13 are preadjusted at the factory to VHF channels 2-13. To reset the channels, see pages 13-20.



- The channel selected before the POWER Switch is set to OFF will be memorized.
- When an external antenna is to be used, refer to page 21.

Color and hue adjustments

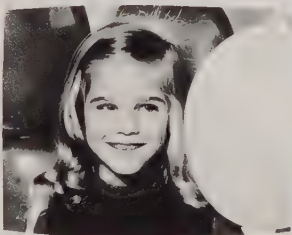
Advanced new automatic circuits are built into your TV to eliminate the necessity for frequent readjustment of the color controls. Set the AUTO Switch to ON. This locks the color processing system to the factory-preset values that assure realistic reproduction of every shade and tint.

Both COLOR and HUE Controls have a limited adjustment range in the AUTO mode. If you wish to control color reproduction manually, set the AUTO Switch to OFF to disengage the automatic color mode.

Adjust the COLOR Control for the desired color intensity.



Picture becomes pale.



Picture becomes vivid.



Adjust the HUE Control for the most natural skin tones.



Skin tones become purplish.



Skin tones become greenish.



- COLOR and HUE adjustments have no effect upon black and white programs.

Brightness adjustment

Correct brightness setting as well as correct contrast setting are important for good color reproduction.

Once the BRIGHT Control is adjusted so that the darkest parts of the picture may be seen as black (probably near the center detent position), the adjustment range of the PICTURE Control will be sufficient for everyday use.

To listen with the earphone (supplied)

For private listening, insert the earphone plug into the [•] receptacle of the EARPHONES Jacks. This disconnects the loudspeaker. The use of the [••] receptacle permits the earphone and the loudspeaker to be used simultaneously.

Vertical hold control

If the picture rolls vertically, adjust the V HOLD Control at the rear.

INTRODUCTION TO CHANNEL PRESETTING

Your Sony color TV employs an advanced electronic tuning system that is capable of receiving up to 14 preselected television channels or other program sources such as a connected cable TV system or video tape recorder.

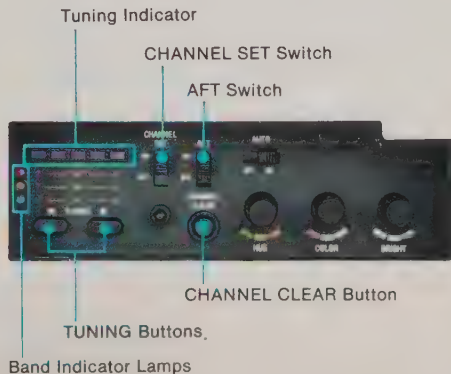
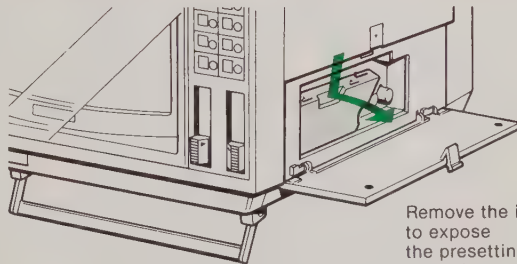
As you receive your Sony TV from the dealer, it has been factory-preadjusted to receive VHF channels 2 through 13 by simply pressing the button on the set's panel having the number corresponding to the channel number. Thus to receive channel 2, press button number 2; to receive channel 7 or 13, press button 7 or 13 etc. This factory presetting permits you to enjoy VHF TV reception immediately. Therefore, if you wish to receive VHF channels only, channel presetting is not generally required.

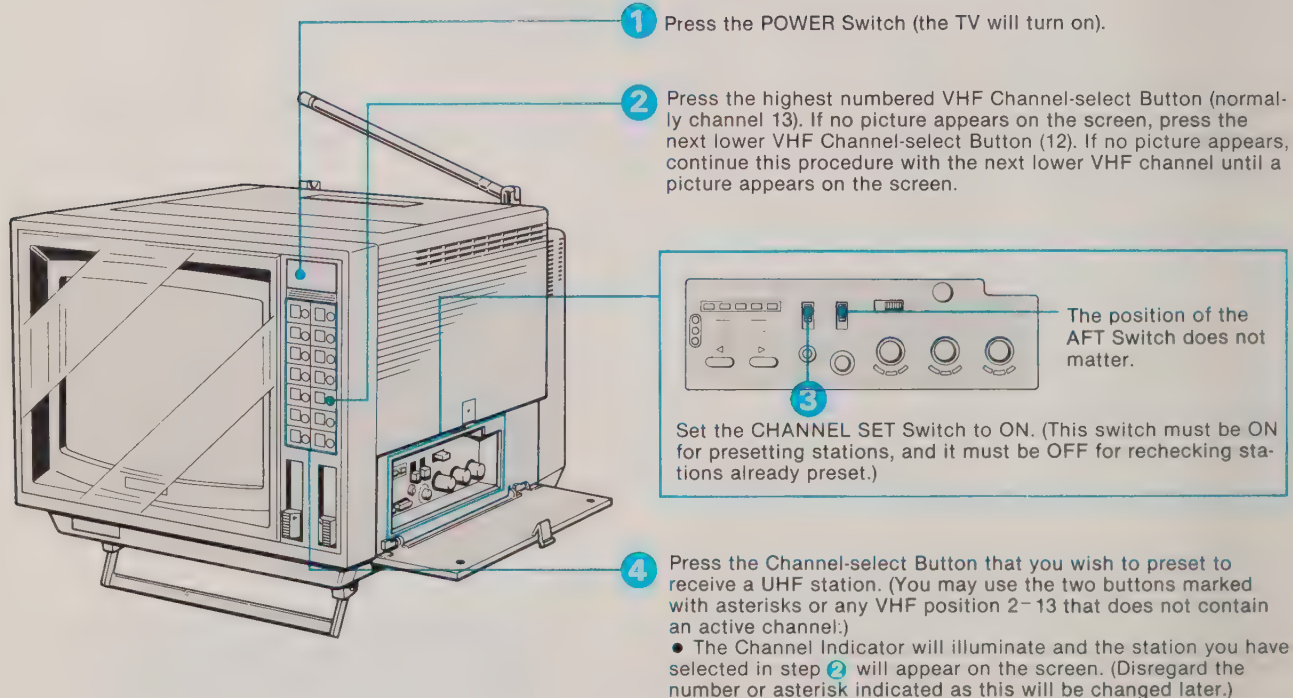
However, because of the geographical distribution of VHF stations in the U.S.A., there will probably be some pushbuttons in the 2-13 range that will not provide reception at your location, with the result that several of these pushbuttons will be unusable for the time being. In addition, you will probably wish to receive several of the locally available UHF channels, and possibly to make provision for cable TV or a video tape recorder.

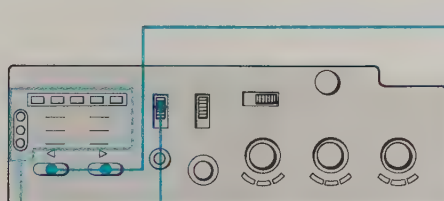
If you wish to preset the UHF channels on the unused positions (page 13), or if you wish to arrange the VHF and UHF channels in numerical sequence or your desired sequence (page 16), perform channel presetting by following one of the two suggested procedures.

Ⓐ TO PRESET UHF CHANNELS ON THE PRESENTLY UNUSED POSITIONS

By using the factory preset 2-13 pushbuttons, you have been able to determine which VHF stations provide good reception. From the local newspaper, or your neighbors, or another TV set, you can determine which UHF stations provide satisfactory reception in your locality.







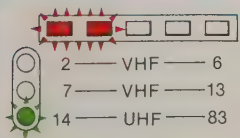
- 5** Press the TUNING-up ► Button (do not hold the button in, just press it momentarily). Allow 1 or 2 seconds for the picture to stabilize.
- In strong signal areas, tuning may sometimes stop between channels. If a station is not received, press the TUNING-up ► Button again.

- 6** Repeat step **5** as required until your desired station appears on the screen. Use the Tuning Indicator and Band Indicator Lamps (explained below) as guides.

STOP! (READ NOTE.)

NOTE: You have preset the desired UHF station on the Channel-select Button you have selected. If another UHF station is not available or you do not wish to continue presetting at this time, proceed to step **8**. If you wish to continue presetting other available UHF stations, proceed to step **7**.

- 7** Select another vacant channel by pressing the desired Channel-select Button; press TUNING-up ► Button, and allow picture to stabilize; continue this procedure until all desired UHF stations have been preselected (if problems are encountered refer to steps **4**, **5** and **6**).
- 8** Set the CHANNEL SET Switch to OFF and make sure the AFT Switch is now set to ON.



Ex. UHF Channel 41

Band Indicator Lamps and Tuning Indicator

The red lamp when lit shows you are in the band including channels 2 through 6, the yellow lamp when lit shows you are in the band including channels 7 through 13, and the green lamp when lit shows you are in the band including channels 14 through 83.

Within each of these bands, the multi-segment Tuning Indicator will show in what portion of the band you are tuned to at any given moment, with the left-most segment indicating the lowest frequency within each band, and the right-most segment indicating the highest frequency within each band.

After the presetting has been completed, replace the Channel Indicating Segments to correspond to your presetting (see page 18) and replace the inner cover.

- If there is a VTR position to be included, refer to page 20.
- To use your TV set with a cable television system, contact a representative of the cable company for instructions regarding channel selection. In most cases, this adjustment will be made by the cable company at the time of installation.

⑥ TO ARRANGE THE ACTIVE VHF AND UHF CHANNELS IN NUMERICAL SEQUENCE OR YOUR DESIRED SEQUENCE

Any pushbutton can be set to any frequency from below channel 2 to the highest UHF TV frequency.

- ① Make a list of your receivable VHF and UHF stations and list them as shown in the following example.

VHF: Channels 2, 4, 5, 7, 9, 11, and 13

UHF: Channels 21, 25, 31, 41 and 47

- ② Having made such a list, remove the Channel Indicator Sheet from the panel, and insert numbers to correspond to your list, as shown on page 13. You are now ready to preset the Channel Select Buttons to correspond to your selection of stations.

Example



- ③ Press the POWER Switch (the TV will turn on).
- ④ Set the CHANNEL SET Switch to ON. (This switch must be ON for presetting station, and it must be OFF for rechecking stations already preset).

⑤ Press the Channel-select Button to be preset first. The station selected just before the CHANNEL SET Switch had been set to ON will appear on the screen (the channels may be preset in any order, however, it is more convenient to start with the lowest channel number and proceed to the highest channel number when channels are placed in ascending numerical order).

- In our example above, we would start by pressing the Channel-select Button marked 4, since channel 2 has already been preset at the factory.

⑥ Using the Tuning Indicator and Band Indicator Lamps (explained in section ④), press the TUNING-up ► Button for locating higher numbered channels or the TUNING-down ◀ Button for locating lower numbered channels. (Do not hold the button in, just press it momentarily). Allow 1 or 2 seconds for the picture to stabilize.

⑦ Repeat step ⑥, as required until your desired station is received.

- In strong signal areas, tuning may sometimes stop between channels. If your desired station cannot be received, press the TUNING Button again.

⑧ Press the next Channel-select Button to be preset and press the TUNING-up ► or TUNING-down ◀ Button as required to locate the next station.

- In our example we would now press the next Channel-select Button, marked 5, and press the TUNING-up Button to receive the next higher station.

⑨ Repeat step ⑧ until all desired stations have been preset.

⑩ Set the CHANNEL SET Switch to OFF and make sure that the AFT Switch is now set to ON.

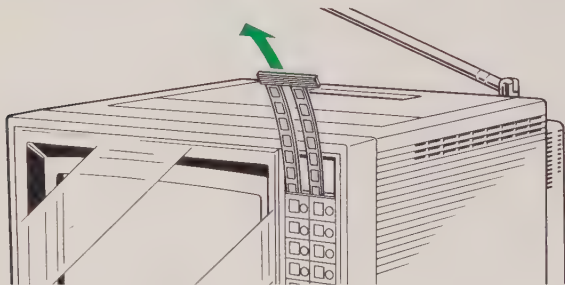
Alternative Tuning Method

Before tuning in the desired station, you may use the CHANNEL CLEAR Button to erase any memory on the depressed Channel-select Button, and to position its tuning to a frequency below channel 2. Then use the TUNING-up ► Button to locate your desired station.

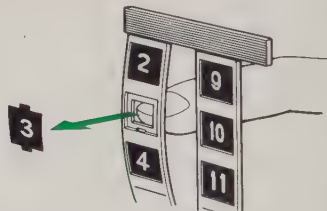
Note: To skip an unused position during remote control operation, press the Channel-select Button to be skipped and then the CHANNEL CLEAR Button. (The CHANNEL CLEAR Button only works while the CHANNEL SET Switch is set to ON).

To replace the number indicating segments

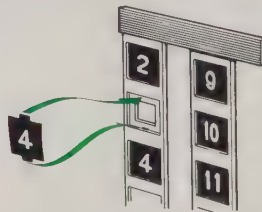
- ❶ Remove the Channel Indicator Sheet with the POWER Switch pushed in.



- ❷ Press the segment out from the rear.



- ❸ Install the correct number segment.



- ❹ Replace the sheet in the original position.

To fine-tune the channel manually

In case of extreme interference, or of an extremely weak station, adjust the fine tuning manually as follows. Check that the CHANNEL SET Switch is set to OFF, set the AFT Switch to OFF and keep the TUNING-up ► or TUNING-down ◀ Button depressed until a clear picture is obtained. Refer to the following chart. When the fine tuning is completed, close the presetting compartment lid with the AFT Switch set to OFF.



To preset for VTR playback

To view the playback picture from a Sony Betamax videocassette recorder (or other VTR) equipped with an RF output terminal, connect a VHF antenna to the recorder (not to the TV) and then connect the VHF (or RF) OUT terminal of the recorder to the VHF antenna terminal of the TV.

At the factory, the button marked 3 is preadjusted to the VHF channel 3 and the button marked 4 to the VHF channel 4. One of these channels, 3 or 4, is locally inactive and may be used to view the VTR playback picture.

If you wish to preset some other position to receive the signals from the recorder, complete the connections and proceed as follows.

- ❶ Set the recorder to the playback mode.
- ❷ Set the CHANNEL SET Switch to ON.
- ❸ Press the Channel-select Button to be preset for viewing the playback picture.
- ❹ Press the CHANNEL CLEAR Button.
- ❺ Press the TUNING-up ► Button until VHF channel 3 or 4 (the operating channel of the rf unit built into the recorder) is received, whereupon a clear picture will be obtained.
- ❻ Set the CHANNEL SET Switch to OFF.

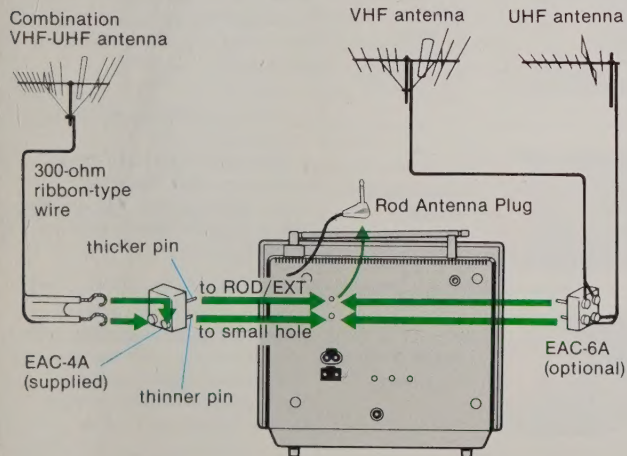
EXTERNAL ANTENNA CONNECTION

In most reception areas, the built-in Telescopic Antenna should be adequate for good reception. However, if you cannot obtain satisfactory reception with it, the use of an external or outdoor antenna is recommended.

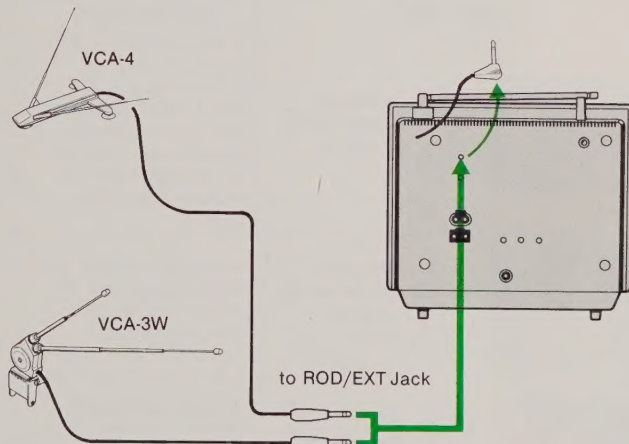
Disconnect the Rod Antenna Plug from the ROD/EXT Antenna Jack and connect a combination VHF-UHF antenna with a single lead-in wire using the EAC-4A External Antenna Connector (supplied) as illustrated.

- When both VHF and UHF antennas are to be used with separate lead-in wires, please use the optional EAC-6A External Antenna Connector.

- When an external antenna is to be used, retract the Telescopic Antenna.



- For optimum reception in your car, the optional VCA-3W Roof-side Automobile TV Antenna for VHF/UHF, or VCA-4 Roof-top Automobile TV Antenna for VHF/UHF is recommended.



CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first

check through this illustrated list of symptoms and corrections. Should the difficulty persist, unplug the set and contact your Sony dealer.

SYMPTOM	CORRECTION
 no picture (screen not lit), no sound	● Plug the set into a working outlet. ● If operating on the BP-81, check that the ac power cord or the car battery cord is disconnected from the TV, or recharge the battery pack.
 no picture (screen not lit), but good sound	● Turn the BRIGHT Control clockwise. ● Slide the PICTURE Control upwards.
 good picture but no sound	● Slide the VOLUME Control upwards. ● Disconnect the ear-phone from the [•] EAR-PHONE Jack.
 no picture, no sound, but snow and noise only	● Connect the Rod Antenna Plug to the Antenna Jack and adjust the Telescopic Antenna. ● Check the external antenna, if connected.

SYMPTOM	CORRECTION
 no color	● Set the AUTO Switch to ON. ● Set the AFT Switch to ON. ● Turn the COLOR Control clockwise.
 herringbone pattern, stripes, no color, no picture, too indistinct, etc.	● Set the AFT Switch to OFF and adjust the fine tuning with the TUNING-up ► or TUNING-down ◀ Button.
 dotted lines or stripes	● Often caused by interference from autos, neon signs, hair dryers, electric razors, etc. Try adjusting the antenna for minimum interference.
 double images or "ghosts"	● Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture.

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF channels 2-13 } a total of up to 14 UHF channels 14-83 } preselected channels
Picture tube	Trinitron tube 8-inch picture measured diagonally 70-degree deflection
Antenna	Telescopic Antenna for VHF and UHF 75-ohm external antenna jack for VHF and UHF
Speaker	10 cm (4 inches) dia.
Power requirements	120 V ac, 60 Hz 12 V or 24 V dc
Power consumption	49 W ac (max.) 40 W dc (12 V), 33 W dc (24 V)
Dimensions	Approx. 261×236×327 mm (w/h/d) (10¼×9⅞×12⅞ inches) incl. projecting parts and controls
Weight	Approx. 8.7 kg (19 lb 3 oz)
Accessories supplied	Earphone AC power cord Channel number segments External Antenna Connector EAC-4A
Optional accessories	Car Battery Cord DCC-15AW Battery Pack BP-81 Car Antenna VCA-3W, VCA-4 External Antenna Connector EAC-6A

Design and specifications are subject to change without notice.

